

#5



SEQUENCE LISTING

<110> Costa, Max
Salnikow, Konstantin
Yee, Herman

<120> METHODS AND COMPOSITIONS USING CAP43 PROTEINS AND NUCLEIC ACIDS TO DIAGNOSE AND TREAT CANCER AND OTHER DISORDERS

<130> 5986/1I147US1

<150> US 10/057,832

<151> 2002-01-25

<160> 3

<170> PatentIn version 3.1

<210> 1

<211> 2972

<212> DNA

<213> Homo sapiens

<400> 1
ctcgcgttag gcaggtgaca gcagggacat gtctcgggag atgcaggatg tagacctcgc 60
tgaggtgaag cctttggtgg agaaagggga gaccatcacc ggcctcctgc aagagtttga 120
tgtccaggag caggacatcg agactttaca tggctctgtt cacgtcacgc tgtgtgggac 180
tcccaaggga aaccggcctg tcatacctcac ctacatgac atcggcata accacaaaac 240
ctgctacaac cccctcttca actacgagga catgcaggag atcaccacgc actttgccgt 300
ctgccacgtg gacgcccctg gccagcagga cggcgcagcc tccttccccg cagggtacat 360
gtacccctcc atggatcagc tggctgaaat gcttctctga gtccttcaac agtttgggct 420
gaaaagcatt attggcatgg gaacaggagc aggcgcctac atcctaactc gatttgctct 480
aaacaacct gagatggtgg agggccttgt ccttatcaac gtgaacctt gtgcggaagg 540
ctggatggac tgggcccgcct ccaagatctc aggatggacc caagctctgc cggacatggt 600
ggtgtccac ctttttggga aggaagaaat gcagagtaac gtggaagtgg tccacaccta 660
ccgccagcac attgtgaatg acatgaacc cggcaacctg cacctgttca tcaatgccta 720
caacagccgg cgcgacctgg agattgagcg accaatgcc ggaaccacaca cagtcaccct 780
gcagtgcct gctctgttgg tggttgggga cagctcgct gcagtggatg ccgtggtgga 840
gtgcaactca aaattggacc caacaaagac cactctctc aagatggcgg actgtggcgg 900
cctcccgag atctccagc cggccaagct cgctgaggcc ttcaagtact tcgtgcaggg 960
catgggatac atgccctcg ctagcatgac ccgctgatg cggccccga cagcctctgg 1020
ttccagcgtc acttctctgg atggcaccgc cagccgctcc cacaccagcg agggcaccgc 1080

aagccgctcc	cacaccagcg	agggcaccgc	cagccgctcg	cacaccagcg	agggggccca	1140
cctggacatc	acccccaaact	cgggtgctgc	tgggaacagc	gccgggcccc	agtccatgga	1200
gggtctcctgc	taggcggcct	gccagctgc	cgcccccgga	ctctgatctc	tgtagtggcc	1260
ccctcctccc	cggccccctt	tgcgccctg	cctgccatac	tgcgcctaac	tcggtattaa	1320
tccaaagctt	atlttgtaag	agtgagctct	ggtggagaca	aatgaggtct	attacgtggg	1380
tgccctctcc	aaaggcgggg	tggcgggtga	ccaaaggaag	gaagcaagca	tctccgcatc	1440
gcctcctctt	ccattaacca	gtggccgggt	gccactctcc	tccccctcct	cagagacacc	1500
aaactgccaa	aaacaagacg	cgtagcagca	cacacttcac	aaagccaagc	ctaggccgcc	1560
ctgagcatcc	tggttcaaac	gggtgcctgg	tcagaaggcc	agccgcccac	ttcccgtttc	1620
ctctttaact	gaggagaagc	tgatccagtt	tccggaacaa	aaatcctttt	ctcatttggg	1680
gaggggggta	atagtacat	gcaggcacct	cttttaacaa	ggcaaacacg	gaagggggaa	1740
aagggtggat	tcattgtcag	gctagaggca	tttggaaaca	caaactctac	tagttaactt	1800
gaagaaaccg	atltttaaa	ttggtgcctc	tagaaagctt	tgaatgcaga	agcaaacaa	1860
cttgattttt	ctagcatcct	cttaatgtgc	agcaaacgca	ggcgacaaaa	tctcctggct	1920
ttacagacaa	aaatatttca	gcaaacgttg	ggcatcatgg	tttttgaagg	cttttagttct	1980
gctttctgcc	tctcctccac	agcccccaacc	tcccaccctc	gatacatgag	ccagtgatta	2040
ttcttgttca	gggagaagat	catttagatt	tgttttgcat	tccttagaat	ggagggcaac	2100
attccacagc	tgccttggtc	gtgatgagtg	tccttgacag	ggccggagta	ggagcactgg	2160
gggtgggggtg	gaattgggg	tactcgatgt	aagggtatcc	ttgttggtgt	gttgagatcc	2220
agtgacgttg	tgatttctgt	ggatcccagc	ttggttocag	gaattttgtg	tgattggctt	2280
aaatccagtt	ttcaatcttc	gacagctggg	ctggaacgtg	aactcagtag	ctgaacctgt	2340
ctgaccgggt	cacgttcttg	gatcctcaga	actctttgct	cttgctgggg	tgggggtggg	2400
aactcacgtg	gggagcggtg	gctgagaaaa	tgtaaggatt	ctggaataca	tattccatgg	2460
gactttcctt	ccctctcctg	cttcctcttt	tcctgctccc	taacctttcg	ccgaatgggg	2520
cagcaccact	gacgtttctg	ggcggccagt	gcggctgcca	ggttcctgta	ctactgcctt	2580
gtacttttca	ttttgggtca	ccgtggattt	tctcatagga	agtttggtca	gagtgaattg	2640
aatattgtaa	gtcagccact	gggaccgcag	gatttttggg	acccgcagct	tgggaggagg	2700
aagtagtcca	gccttccagg	tggcgtgaga	ggcaatgact	cgttacctgc	cgcccatcac	2760
cttgagggcc	ttccctggcc	ttgagtagaa	aagtcgggga	tcggggcaag	agaggctgag	2820
tacggatggg	aaactattgt	gcacaagtct	ttccagagga	gtttcttaat	gagatatttg	2880

tattttatttc cagaccaata aatttgtaac ttgcaaaaaa aaaaaaaaaa aaaaaaaaaa 2940
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 2972

<210> 2
 <211> 394
 <212> PRT
 <213> Homo sapiens
 <400> 2

Met Ser Arg Glu Met Gln Asp Val Asp Leu Ala Glu Val Lys Pro Leu
 1 5 10 15

Val Glu Lys Gly Glu Thr Ile Thr Gly Leu Leu Gln Glu Phe Asp Val
 20 25 30

Gln Glu Gln Asp Ile Glu Thr Leu His Gly Ser Val His Val Thr Leu
 35 40 45

Cys Gly Thr Pro Lys Gly Asn Arg Pro Val Ile Leu Thr Tyr His Asp
 50 55 60

Ile Gly Met Asn His Lys Thr Cys Tyr Asn Pro Leu Phe Asn Tyr Glu
 65 70 75 80

Asp Met Gln Glu Ile Thr Gln His Phe Ala Val Cys His Val Asp Ala
 85 90 95

Pro Gly Gln Gln Asp Gly Ala Ala Ser Phe Pro Ala Gly Tyr Met Tyr
 100 105 110

Pro Ser Met Asp Gln Leu Ala Glu Met Leu Pro Gly Val Leu Gln Gln
 115 120 125

Phe Gly Leu Lys Ser Ile Ile Gly Met Gly Thr Gly Ala Gly Ala Tyr
 130 135 140

Ile Leu Thr Arg Phe Ala Leu Asn Asn Pro Glu Met Val Glu Gly Leu
 145 150 155 160

Val Leu Ile Asn Val Asn Pro Cys Ala Glu Gly Trp Met Asp Trp Ala
 165 170 175

Ala Ser Lys Ile Ser Gly Trp Thr Gln Ala Leu Pro Asp Met Val Val
 180 185 190

Ser His Leu Phe Gly Lys Glu Glu Met Gln Ser Asn Val Glu Val Val
 195 200 205

His Thr Tyr Arg Gln His Ile Val Asn Asp Met Asn Pro Gly Asn Leu
 210 215 220

His Leu Phe Ile Asn Ala Tyr Asn Ser Arg Arg Asp Leu Glu Ile Glu
 225 230 235 240

Arg Pro Met Pro Gly Thr His Thr Val Thr Leu Gln Cys Pro Ala Leu
 245 250 255

Leu Val Val Gly Asp Ser Ser Pro Ala Val Asp Ala Val Val Glu Cys
 260 265 270

Asn Ser Lys Leu Asp Pro Thr Lys Thr Thr Leu Leu Lys Met Ala Asp
 275 280 285

Cys Gly Gly Leu Pro Gln Ile Ser Gln Pro Ala Lys Leu Ala Glu Ala
 290 295 300

Phe Lys Tyr Phe Val Gln Gly Met Gly Tyr Met Pro Ser Ala Ser Met
 305 310 315 320

Thr Arg Leu Met Arg Ser Arg Thr Ala Ser Gly Ser Ser Val Thr Ser
 325 330 335

Leu Asp Gly Thr Arg Ser Arg Ser His Thr Ser Glu Gly Thr Arg Ser
 340 345 350

Arg Ser His Thr Ser Glu Gly Thr Arg Ser Arg Ser His Thr Ser Glu
 355 360 365

Gly Ala His Leu Asp Ile Thr Pro Asn Ser Gly Ala Ala Gly Asn Ser
 370 375 380

Ala Gly Pro Lys Ser Met Glu Val Ser Cys
 385 390

<210> 3
 <211> 2131
 <212> DNA
 <213> Homo sapiens

<400> 3
 ttctcatcttt ttgttagaga tgggacatca ctatgttgtg aaggctgggc tcaaactcct

60

ggactcaaga gaggcttctg cattggcctc ccaaagtgct gggattacag gtgtaagcca	120
ctctacctgg acacaacatt ttatttgaaa taagaaaaat tttccctcac tgggaatgct	180
gcagttgaac tagttcaaat ccataaagaa tggaagactg ccagtggtc attcattcac	240
ttattaattc tagatgttaa attttctagg gtgggggaat gtgctctac attcaaggca	300
ttcttgaatg tagccaaact ttgtagttta gccaaacttc atagctaata gccaaacttt	360
gtagtttagc caaactcttc tagcagcaaa acccatgaca ctggaactct gttcttcaca	420
ctggtcattt gtaatagaat aacagagctt tagcactaga taggttctga aagatcattg	480
aatctaattc tctccctttg ccagtgagaa ttctgaagcc cagatttggt gatttgtgat	540
cgatagtgtc aaagacaggc ctgaaacaca gatgtcctgg gtcttagagg tgctgtttgc	600
ccctctccat atttcttttg ttccagaaaa cccttctcca aaactggccc taataatcag	660
aggggaaagc catggcccct gccttgggga cagcatgggt tggcacagaa aagaggttta	720
caattcagca ggaagtgttg tgcgtgcgcg cgtgtgtgtc tgtggaggcg cagggagggt	780
cacctgagct tgccctgggt ctggctcctgg gctcagtggc aaattcaacg ctgggcaggt	840
ggcctgagga caatgacggt gccagctgtg agtcagactt cctttattca taaaatcatg	900
ttcctccatg cagtgttct caacctgggt gcacgtcagg agccacctgg gtagctttgt	960
aaaaaccca atgccagtt ggtttgcacc ccctgagatt ctgattaaac tgttctggag	1020
tccatctctc tctttttatt atctatctat ttattttatt tttaatttgg cggtcctct	1080
gggacttctc atatgcagta ggggttgaga attgctggtt tctttggcca gatgggaaca	1140
tgcaggccaa tagttacgca caaacagagc agcagagcag gacggtgcta aggttggaaa	1200
gggtgagtca tgaaagttca ggaaatcaga ataggaaggg gtgagaatcc tctcatctgg	1260
gcttgtgggg caggagagaa gagccagtg ggcaagggtc agtgagtgtg cttagaactg	1320
ggaagatgag gggaagggtg agcgtgggc ggcggtgggc aatatggacg agattaaacg	1380
ggagcgagga tttcagcgag agctttggcg acacggaagg ctgagaatcg gagggagcct	1440
gtcgggcgaa agcgaaggcg gctgctgggc aggcagccga atccggctgg agagccgagc	1500
tggtgagacc tacaggaagt gaagggagtc gctcagggcg tggcgcaacg agactcttag	1560
aagaaactct gaggcagaga tggggggcct ccgccatac ggagacacaa ggaagtccac	1620
atgcacacgc acgagcgcgc acatgaacac gcacaagcac acaaacgcct cctccgggca	1680
gggcacacgc gcccgtgca caggccgagg ccctggactc ggaggggact gcagagccga	1740
cccacaaccc gggccccgat gccctcccg gccgcgcccc tacgactgct tgcgcaacag	1800
gcggcggtc cagtgggcgc ccgccgcgcg ctgccggagc ccagcccagc ccggcgcgcc	1860

cgggaggagg gagcagggag cggggaaggg gtgtgtcccg gctgcgtgct gggactgcga	1920
gggtctggga ggggcgaggc gcgggggcgg ggccgcggcg cctataaagt cgccctccgc	1980
ccggacgtaa acaaacctcg cctggctccc agctggtgct gaagctcgtc agttcaccat	2040
ccgccctcgg cttccgcggg gcgctgggcc gccagcctcg gcaccgtcct ttcctttctc	2100
cctcgcgtta ggcaggtgac agcagggcat g	2131